commissions, including the Virginia SCC. *See, e.g., Virginia Hearing Examiner Report* at 111. The Commission has considered Verizon's loop qualification process in all of its section 271 proceedings. In all cases, the Commission found that Verizon's loop qualification process complies with the Act. *See generally Rhode Island § 271 Order* ¶ 61; *New Jersey § 271 Order* ¶ 76 n. 204; *New York § 271 Order* ¶ 140. In the Virginia section 271 proceeding, the Commission confirmed that:

> Verizon provides competitive LECs with access to loop qualification information consistent with the requirements of the *UNE Remand Order*. Specifically, we find that Verizon provides competitors with access to all of the same detailed information about the loop that it available to itself and in the same time frame Verizon personnel obtain it.
>
> * * *
>
> We find, based on the evidence in the record, that Verizon is providing loop qualification information in a nondiscriminatory manner.

Virginia § 271 Order ¶¶ 29, 34. While Verizon has enhanced its loop qualification process since the Commission issued the *Virginia § 271 Order* to accommodate several CLEC requests, the contract language deleted by Cavalier has not changed. *Albert Panel Direct* at 9:9-12. *Hearing Tr.* at 436:3 – 437:8 (Clayton). The Bureau should approve Verizon's language here as well.

B. Verizon Currently Offers Cavalier The Option To Purchase Loops Over 18,000 Feet In Length.

Cavalier also proposed to delete Verizon's proposed section 11.2.12(A), which defines "Digital Designed Loops" to include 2-wire digital loops with a total loop length of 18,000 to 30,000 feet, with bridged taps and load coils removed, at Cavalier's option. This offering, which has been available to CLECs for several years, allows CLECs to provide xDSL services on long loops. *Albert Panel Direct* at 9:17-22. As Verizon witness Clayton explained at the Hearing:

> Cavalier is requesting a loop over 18,000 feet, out to, I believe, 30,000 feet. [Cavalier] can get that today. [Verizon does] not believe that

> [Verizon has] done anything to restrict [Cavalier] from taking advantage of that offering. In addition, [Verizon] offer[s] conditioning options on an 18 to 30,000 foot loop. If Cavalier needs to have that loop conditioned, meaning load coils removed, Verizon will perform that activity.

Hearing Tr. at 424:1-9 (Clayton).

Cavalier has never adequately explained why it deleted this language. Cavalier witness Edwards submitted testimony that Cavalier "did not necessarily need all of the features" described in this contract language (*Edwards Rebuttal* at 2: 4-7), but has not provided any reason explaining what portion of Verizon's language he objected to.

Mr. Edwards also stated in his testimony that Verizon had refused to provide Cavalier with xDSL loops over 18,000 feet (*Edwards Rebuttal* at 2:2-3), but he provided no substantiation, and the Commission has previously rejected this same vague claim. In the *Virginia § 271 Order*, the Commission held:

> Cavalier complains that Verizon refuses to provide loops over 18,000 feet to competing carriers seeking to offer xDSL service even when competitive LECs' equipment is capable of offering DSL services at those loop lengths. Verizon clarifies that it does offer such loops through its loop conditioning offerings. Although DSL-capable loops typically contain load coils that are necessary for the provision of voice service, Verizon states that it will remove these load coils for a competitive LEC pursuant to an interconnection agreement and subject to applicable loop conditioning charges. In the absence of additional evidence to the contrary, we find that Verizon's offerings for the provision of DSL-capable loops over 18,000 feet are reasonable....

Virginia § 271 Order ¶ 149. Verizon's proposed contract language offers these same options to Cavalier, so the Bureau should adopt that language.

C. Verizon Does Not Use Spectral Density Masks To Prevent Cavalier From Deploying "Reach DSL" Technology

Cavalier also claims that Verizon's spectral density masks prevent Cavalier from deploying DSL on loops over 18,000 feet. *Vermeulen Direct* at 2:1-13. A spectral density mask

imposes power and frequency limits on xDSL service in order to prevent that service from interfering with other telecommunications services sharing the same loop. *Albert Panel Direct* at 10:20-22; *Line Sharing Order* ¶ 182 n. 390. Industry standards bodies, with input from ILECs, CLECs, and equipment vendors, in addition to lab testing results, establish the spectral density mask limitations on xDSL services that Verizon uses and that are reflected in Verizon's proposed language. If a carrier providing xDSL service over that loop does not stay within the limitations of the spectral density mask, the loop may not work, or, other voice or data loops for other CLECs or end users within the same binder group may be affected. *Albert Panel Rebuttal* at 9:10-18.

Verizon complies with these National Standards and all Commission rules and orders relating to xDSL technologies and interference issues. *Albert Panel Direct* at 10:24 – 11:1. In the *Line Sharing Order*, the Commission specifically approved the use of spectral density masks to limit interference from xDSL services. *Line Sharing Order* ¶ 6. Verizon's use of spectral density masks is consistent with that order and with 47 C.F.R. § 51.231(a)(1), which requires Verizon to disclose limitation, such as spectral density masks, on xDSL services provided over its loops. In fact, the industry-wide standards with which Verizon complies are publicly available.

Verizon does not use spectral density masks to prevent Cavalier from deploying its "Reach DSL" technology. The following exchange at the Hearing between Cavalier's counsel and Verizon witness Clayton makes this clear:

> Perkins: It's true, isn't it, that Verizon has some very specific power spectral density limitations in the language it has proposed to Cavalier, isn't it?
>
> Clayton: I don't agree, no.
>
> Perkins: Why not?

> Clayton: Again, I don't think that any of the loops for DSL product line prevents Cavalier from ordering anything, specifically their Reach DSL product that's been referenced to here. That product can be ordered today over a two-wire digital designed metallic loop that's between 18 and 30,000 feet. [Verizon has] not prevented Cavalier from ordering that loop type. [Verizon has] not prevented other CLECs from ordering that loop type. It is something that is in our contract. [Verizon has] recently revised the language. It is available to CLECs and CLECs are ordering it today.

Hearing Tr. at 421:4-21 (Perkins/Clayton). Furthermore, Verizon has never denied Cavalier's request to provide DSL services over a particular loop, and Verizon has never denied Cavalier's request to deploy any DSL technology.[1] *Hearing Tr.* at 421:16-17 (Clayton).

However, in response to concerns that Cavalier raised at the hearing, Verizon has offered a compromise Section 11.2.8(a), clarifying the spectral density mask specification applicable to xDSL loops over 18,000 feet. *See Verizon Final Offer*, at 5-6. Cavalier appears to agree with most of Verizon's compromise language, but now wants to extend the technological specifications of Verizon's compromise loop offering to include loops under 18,000 feet, even though loops under 18,000 feet were never put at issue by Cavalier. *See Cavalier's Petition*, Exhibit A at 2. Verizon, however, cannot extend the technological specifications of its compromise language to loops under 18,000 feet because these shorter loops use a different technical specification, and Verizon's ordering, provisioning, and maintenance systems would have to be substantially modified to have shorter loops meet the longer loop technical specification. Verizon's proposed compromise language should therefore be adopted.

[1] Therefore, in answer to Staff's question at the Hearing, 47 C.F.R. Sections 51.230 and 51.231(a)(2)-(3) are not relevant here because the obligations imposed by these sections apply to incumbents when they deny a requesting carrier's request to use a specific technology.

D. Cavalier's Unprecedented Request For A 60-Day Transfer Period For Potential Cavalier DSL Customers Should Be Rejected.

Cavalier proposes that if it has used the mechanized or manual loop qualification tools described above and been informed that a particular customer's loop does not qualify for xDSL service, and if, within 60 days Verizon provides xDSL to that same customer, Verizon would be required to transfer that customer to Cavalier at no cost to Cavalier. Cavalier's Proposed Section 11.2.13. Cavalier's proposal is an attempt to avoid paying for the costs that must sometimes be incurred to make an xDSL loop available. *Albert Panel Direct* at 12:22-23.

Even if the manual or mechanized process reports that a customer's loop is unqualified for xDSL, Cavalier does not have to abandon its attempt to provide xDSL service to that customer. First, if the customer can be switched to a different loop that does qualify for xDSL, Verizon will make this change, called a "line and station transfer," provided that Cavalier pays the costs of the procedure. Second, if the customer cannot be switched to a qualifying loop, Cavalier can pay the costs of conditioning the customer's existing loop (for example, by removing load coils on loops over 18,000 feet) so that Cavalier can provide the customer with xDSL service. *Albert Panel Direct* at 13:1-8.

If Cavalier chooses not to pay for these costs, that customer may well call another carrier (for example, Verizon) to see whether it can provide service. Verizon would use the same loop qualification tools available to Cavalier and discover that the loop is not qualified. But if Verizon is willing to pay the costs of transferring the customer to a qualifying loop or the costs of conditioning the customer's existing loop, Verizon can serve the customer. This is entirely appropriate: Verizon and Cavalier have exactly the same options. Yet, under Cavalier's proposal, if Verizon bears the costs of making an xDSL capable loop available to the customer, Verizon would still have to turn the customer over to Cavalier free of charge. Cavalier's

proposal would therefore allow Cavalier to improperly shift its costs to Verizon. *Albert Panel Direct* at 13:9-18.

Indeed, Cavalier cannot cite to a single example of the situation that Cavalier's contract language is designed to remedy. In his Direct Testimony, Cavalier's witness Mr. Edwards admits that Cavalier's proposal is based on "anecdotal" situations that Cavalier "has never been able to track precisely." *Edwards Direct* at 1:22 – 2:4. His Rebuttal Testimony provided no more detail, acknowledging that "Cavalier does not have extensive information about [these situations]." *Edwards Rebuttal* at 2:13-16. Cavalier's proposed language on this issue is an extreme solution in search of a problem, and should therefore be rejected.

E. Verizon Always Provides A 4-Wire Transmission Channel When Cavalier Requests One.

Cavalier claims that it will not be able to order a 4-wire DS-1 loop under Verizon's Proposed Section 11.2.9. *Webb Direct* at 2:8-10. In fact, under Verizon's proposed language, Cavalier can order a DS-1 loop with a 4-wire interface at each end. *Hearing Tr.* at 430:17 – 431:5 (Clayton). Verizon chooses the technology between the interfaces. In some cases, that may be 2-wire facility using sophisticated HDSL-2 electronics, but in all cases, Cavalier receives the capacity of a "four-wire transmission channel." *Hearing Tr.* at 430 :17-19 (Clayton). As long as Verizon delivers the DS-1 capacity that Cavalier has ordered and the 4-wire interface that it wants to use, Verizon should be able to use whatever technology between the interfaces that Verizon chooses.

If Cavalier wishes to use another type of loop for the delivery of DS-1 services, such as one that uses another type of electronics or more metallic pairs, then the contract gives it that opportunity through the 2-Wire and 4-Wire HDSL-Compatible Loop offerings detailed in

Sections 11.2.5 and 11.2.6 of Verizon Proposed Agreement. *Albert Panel Rebuttal* at 8:26 – 9:5. Cavalier can then supply its own electronics with these loop types to provide DS-1 service.

F. The Bureau Should Reject Cavalier's Proposal To Import Rates For Loops And Loop Conditioning From Other States.

Cavalier objects to Verizon's current loop conditioning rates in Virginia.[2] Cavalier ignores these rates and asks that the Bureau set rates for loop conditioning "[a]t the lowest Verizon rate approved by a public service commission within Cavalier's footprint." Cavalier's Proposed Agreement, Exhibit A. The Commission has examined and rejected Cavalier's complaints about Verizon's Virginia loop conditioning rates in the Virginia section 271 proceeding. *Virginia § 271 Order* ¶¶ 124 – 126. ("[W]e find that Verizon's use of proxy rates produced rates that are within the range that a reasonable application of TELRIC principles would produce, and therefore, we reject Cavalier's argument."). During the Hearing, Cavalier also specified that it wanted to import the loop-conditioning rate from Maryland. *Hearing Tr.* at 470:13-16 (Perkins). The Commission, however, already rejected the exact request in the Virginia section 271 proceeding. *Virginia § 271 Order* ¶ 128. Cavalier has offered no good reason for revisiting the Commission's determination here.

Cavalier has filed no cost studies to support its rate proposal, nor has Cavalier submitted any evidence to support its contention that Verizon's Virginia rates are otherwise inappropriate. Since rates must be cost-based, the Bureau cannot set rates without cost studies. Therefore, the Bureau should reject Cavalier's rate proposal and approve the TELRIC-compliant rates for loops and loop conditioning that the Commission has already approved in the Virginia Section 271 proceeding. In addition, Cavalier proposes that the loop conditioning rates in its contract should

[2] Staff asked Verizon to provide the source for each of the rates Verizon charges in Virginia. That information is attached as Exhibit 2.

automatically become the rates the Bureau approved in the *Virginia Arbitration Cost Order*. Consistent with Section 252(i) of the Act, Verizon will make available any "interconnection, service, or network element" upon the same terms and conditions as those provided in AT&T's agreement. Neither the Act nor the Commission's rules, however, permit a party to adopt a rate separate from the terms and conditions for providing that network element. Instead, in order for a carrier to adopt a rate pursuant to Section 252(i), it must also adopt the legitimately related terms and conditions of the element associated with that rate.[3] But since Cavalier has requested various changes to the language in the AT&T agreement, under Section 252(i) it can only opt into the loop conditioning rates if it also adopts the accompanying terms and conditions. But Cavalier has not said whether it wants the accompanying terms and conditions (and indeed in some cases is affirmatively asking the Commission for terms that are contrary to those in the *Virginia AT&T Agreement*). Therefore, it would be premature for the Commission to decide now, without knowing whether Cavalier will adopt *all* the related terms and conditions, that Cavalier is entitled to AT&T's rates for loop conditioning.

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[3] *See In re US Xchange of Indiana, LLC*, 2002 WL 1059769, at ~5 [slip copy, page numbers not defined] (Ind. URC Mar. 13, 2002) ("This Commission supports and encourages adoptions pursuant to Section 252(i). Allowing a carrier to adopt into provisions of previously negotiated or arbitrated agreements is certainly pro-competitive. However, it is clear from the Act, the FCC and the U.S. Supreme Court that those adoptions must incorporate the rates, terms and conditions that are legitimately related to the individual interconnection, service or element."); *In Re Rhythms Links, Inc.*, Docket No. 20226, 1999 WL 33590962, slip copy at ~104 [page numbers not defined] (Tex. P.U.C. Nov 30, 1999) ("The Arbitrators find that Rhythms is entitled to 'pick and choose' rates and conditions from other, already approved, interconnection agreements. The Arbitrators find that Rhythms may 'pick and choose' individual elements and rates when it agrees to adopt the legitimately related terms and conditions."); Order on Arbitration; *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 ¶ 1315 (1996) ("[w]e conclude that the 'same terms and conditions' that an incumbent LEC may insist upon shall relate solely to the individual interconnection, service, or element being requested under section 252(i).")

G. Cavalier Is Not Entitled To Expedited Maintenance Intervals For xDSL Loops.

Cavalier proposes that Verizon should respond to trouble tickets for all xDSL loop types within the same interval that Verizon responds to trouble tickets for DS-1 loops. Cavalier's Proposed Section 11.2.12. Cavalier's proposal should be rejected for several reasons.

First, Cavalier's proposal is inconsistent with the Virginia Carrier-to-Carrier Guidelines, under which Verizon's maintenance intervals for xDSL loops are measured against Verizon's maintenance intervals for Plain Old Telephone Service, not DS-1 loops. *Virginia Carrier-to-Carrier Guidelines* at 6; *Albert Panel Direct* at 11:21-23.

Second, because maintenance intervals for xDSL typically are longer than DS-1 maintenance intervals, both for Verizon's customers and for other CLEC customers, Cavalier's maintenance interval proposal would result in Cavalier receiving better service for many xDSL loops than other CLEC customers. *Albert Panel Direct* at 12:1-5.

Third, Cavalier's request for unique maintenance intervals is not feasible. If Cavalier has its own set of intervals, other CLECs will want the same. Verizon has interconnection agreements with 180 CLECs in Virginia, and Verizon cannot be expected to shoulder the burdens of administering 180 different sets of intervals. *Albert Panel Direct* at 12:5-9.

Fourth, even if Verizon could administer such a system, both the Virginia Carrier-to-Carrier Guidelines and the Virginia PAP are based on standard intervals for all CLECs. Implementing CLEC-specific intervals would be inconsistent with both the Carrier-to-Carrier Guidelines and the PAP and would greatly complicate reporting. For these reasons, the Bureau should reject Cavalier's proposal for unique maintenance intervals. *Albert Panel Direct* at 12:9-13.

For all of the reasons stated above, the Bureau should reject Cavalier's proposed language on this issue.

H. Verizon Has Not Waived Any of Its Loop Qualification Language

Cavalier argues that Verizon should be foreclosed from proposing parts of its loop qualification language because they relate to Issue V26 which, Cavalier claims, has been "waived or released by Verizon." Cavalier's Reply to Verizon's Answer at 4. Cavalier apparently makes this waiver claim because Verizon did not specifically reference Issue V26 in its Answer. As Cavalier acknowledges in Exhibit A of its Petition, however, Issues C9 and V26 are the same. Both issues address the fact that Cavalier strikes all of Verizon's language in Section 11.2.12, which concerns loop qualification. Consistent with the Commission's rules, Verizon provided the basis for Verizon's position on this issue as well as the relevant legal authority in its Answer filed on September 5, 2003. Therefore, there is no basis for accepting Cavalier's contention that Verizon has waived or released its claim to include any of the language in Section 11.2.12 in the parties' agreement because Verizon did not specifically mention Issue V26.

VIII. THERE IS NO SUPPORT FOR CAVALIER'S PROPOSED CHANGES TO VERIZON'S PROCESSES FOR PROVISIONING DARK FIBER (ISSUE C10)

There is no problem with Verizon's dark fiber provisioning in Virginia, so there is no need for Cavalier's proposed extreme revisions to Verizon's dark fiber processes. During Verizon's section 271 proceeding in Virginia, the Commission examined Verizon's dark fiber offering in detail, including the changes required by the Bureau in the Virginia Arbitration Order, and concluded that Verizon's dark fiber provisioning methods fully complied with Verizon's obligations under the Act. *Virginia § 271 Order* at 145-147. Because Cavalier has not identified

any specific problems with Verizon's Commission-approved dark fiber processes, Cavalier's proposed changes in that process are unnecessary, burdensome, and unjustified by law. The Bureau should reject them.

A. Cavalier's Dark Fiber Queue Proposal Is Unduly Burdensome And Unnecessary

Cavalier's proposal would require Verizon to place Cavalier's unsatisfied dark fiber requests in a queue for a period of two to four years. Cavalier's Proposed Section 11.2.15.4.1. There is, however, no need for a queue because Verizon's existing system is designed to reduce the number of dark fiber requests that are rejected in the first instance. If fiber is unavailable on Cavalier's requested routes, Verizon will search for alternative routes through intermediate offices in order to fill Cavalier's request. Verizon's Proposed Section 11.2.15.4.

Furthermore, there is no guarantee that Cavalier would even take the fiber if it should become available after two (or four) years. Indeed, given the pace of regulatory, market, and technological changes in the telecommunications industry, two to four years is an inordinately long time. If a particular fiber route is unavailable, Verizon assumes that, after two (or four) years has passed, Cavalier will have found another way to provide its planned service. *Albert Panel Direct* at 18:9-14.

Cavalier erroneously claims that a queue system will "reduce the burden" on Verizon (*Ashenden Direct* at 3:4). Verizon does not have a system to conduct dark fiber inquiries on a mechanized basis. Therefore, as Verizon witness Albert explained, Cavalier's proposal would require Verizon to conduct a manual engineering query every day for a period of up to four years. *Hearing Tr.* at 278:8-11. A queue system will therefore only increase Verizon's administrative burdens. *Albert Panel Rebuttal* at 11:7-9.

Furthermore, Verizon would likely have to bear these burdens, not just for Cavalier, but for other carriers as well. If the Bureau approves Cavalier's queue proposal, it would be available to any Virginia CLEC adopting this Agreement's dark fiber provisions. Verizon would therefore be required to establish a sophisticated system for conducting continual manual dark fiber inquiries for years for multiple routes – again, with no guarantee that a CLEC will still want to purchase the dark fiber if and when it does become available. *Albert Panel Direct* at 18:17 – 19:1.

Cavalier compares its proposed dark fiber queue to the collocation queue process (*Ashenden Direct* at 2:22 – 3:2), but collocation and dark fiber are very different products. The collocation queue process applies only to central offices with no physical collocation space available, and there are currently only five of these in Virginia. By contrast, Verizon has thousands of assignable fiber optic cable segments in Virginia. *Albert Panel Direct* at 19:6-10. In fact, there is no "queue" process for any UNE, nor has any CLEC requested one. *Albert Panel Rebuttal* at 12:5-9.

Nothing in the Act requires Verizon to set up this kind of complex, burdensome, manual queue system for CLECs, requiring large expenditures for little or no benefit.[4] Verizon witness Albert explained that the annual cost of a queue for just one dark fiber segment would be upwards of $60,000. *Hearing Tr.* at 279:21 (Albert).

Therefore, the Bureau should reject Cavalier's contract language establishing a dark fiber queue.

[4] *See Virginia § 271 Order* ¶ 34 (an incumbent is obligated to provide a CLEC with the same information that it provides itself); ¶ 35 n.98 (*citing UNE Remand Order* ¶ 427 ("If an incumbent LEC has not compiled such information for itself, we do not require the incumbent to … construct a database on behalf of requesting carriers.")).

B. Verizon Does Not Have, Nor Does Cavalier Need, The Detailed "Connectivity Map" That Cavalier Requests

Verizon will, at Cavalier's written request, create a fiber layout map showing existing fiber within a designated wire center for Cavalier's use in performing preliminary network planning and engineering work. Verizon will provide these maps at time and materials charges, subject to a non-disclosure agreement that limits disclosure to Cavalier personnel that need the fiber layout information to design Cavalier's network. *Verizon's Proposed Section* 11.2.15.5. Cavalier would add language to Verizon's Proposed Section 11.2.15.5 that would require Verizon to create and provide a more detailed fiber connectivity map. Albert Panel Direct at 20:15 – 21:2.

Cavalier's fiber connectivity map proposal is unreasonable and unnecessary because Verizon does not have standard maps with the detailed information that Cavalier's proposal would require (*Hearing Tr.* at 224:21-22 (Albert)), because Verizon already provides wire-center-specific fiber layout maps, and because Verizon already searches for alternative routes between wire centers when the requested route is unavailable. Cavalier thus has no need for detailed information about all fiber routes in the entire LATA. There may have been more of a need for the information Cavalier seeks here prior to the Bureau's ruling in the *Virginia Arbitration Order*, but that order made it clear that CLECs are no longer responsible for searching out alternative routes between wire centers when the requested route is unavailable. Now, Verizon is responsible for this work, and therefore Verizon's existing measures satisfy any legitimate need Cavalier has for network planning. *Albert Panel Rebuttal* at 13:2-7; *Hearing Tr.* at 223:9-13 (Albert).

Cavalier has provided no support for its assertion that "Cavalier's suggested map format is the same one used by vendors of dark fiber other than Verizon." *Ashenden Direct* at 3:15-16.

In response to a discovery request to Cavalier to produce a map that Cavalier received from one of the "typical vendors" to which Cavalier witness Ashenden refers in his testimony, Cavalier only produced a map that Cavalier generated itself. *See Verizon's Request for Production* C10-1 and *Cavalier's Responses,* attached at Exhibit 3. Furthermore, any comparison between Verizon's offerings and those of dark fiber vendors is irrelevant. Verizon is not a dark fiber vendor.

C. Cavalier's Proposal For A "Joint Field Survey" Is Unnecessary, Unduly Burdensome, And Unlikely To Serve Cavalier's Stated Purpose

Verizon has agreed to perform a field survey, at Cavalier's request and for time and materials charges, to physically verify whether fiber is available between designated Verizon central offices. Verizon's Proposed Section 11.2.15.5(ii); *Albert Panel Direct* at 21:11-16. Cavalier, however, seeks to require field surveys conducted jointly by Verizon and Cavalier. Cavalier's Proposed Section 11.2.15.5(ii). If Cavalier's language is adopted, the engineers and construction crews who conduct field surveys would be required to make appointments with Cavalier, limiting their ability to schedule their own work in an efficient manner.

Cavalier has suggested that a joint field survey would "limit the scope of potential disagreement between Cavalier and Verizon ... by bringing engineers and technicians together in the field." *Ashenden Direct* at 4:2-5. As Verizon witness Albert explains, however, the Verizon technicians doing the field surveys are not the right people to answer questions for Cavalier's engineers:

> the employees of Verizon that do the fieldwork for a field survey, those people are cable splicers, those are the unionized individuals in the bucket trucks and pumping out the manholes. Those are the individuals, and usually you'll send out a pair of them, to actually do the field verification of what's working and what's spare and what exists. Now, those people are not going to be able to answer questions that your engineers may have

> or they're not going to be able to answer questions relative to, you know, can you provide dark fiber or what can you do to provide dark fiber.

Hearing Tr. at 233:9-20 (Albert). Joint surveys would therefore add complexity and inefficiency, but little or no value. *Albert Panel Direct* at 13:15-17.

D. There Is No Need For A Dispute Resolution Mechanism Specifically For Dark Fiber Disputes

Cavalier proposes language that would require the parties "to negotiate in good faith to devise a viable, alternative means of resolving any disputes about the availability of dark fiber, if the maps or field survey process described [in Cavalier's proposal] leave either party with doubt or uncertainty about the availability of dark fiber." Cavalier's Proposed Section 11.2.15.5. The parties have already agreed upon dispute resolution procedures to govern disputes under their Agreement. Verizon's Proposed Section 28.11. These procedures would cover disputes about dark fiber availability so there is no need for the parties to specify different dispute resolution procedures for different kinds of disputes.

Indeed, Cavalier's language does not explain how the negotiated dark-fiber-specific dispute resolution mechanism should differ from the general dispute resolution procedures; it simply directs the parties to negotiate a dark-fiber-specific procedure. In addition, there would be no objective standards for triggering the contemplated dark fiber dispute resolution procedures; Cavalier could invoke it whenever it had a subjective feeling of "doubt or uncertainty" about the accuracy of the fiber maps or field surveys. Cavalier's proposal thus would likely lead to costly and unnecessary disputes and should be rejected. *Albert Panel Direct* at 22:4-14.

E. Cavalier Does Not Require The Expanded Information It Requests In Response To A Dark Fiber Inquiry; If Cavalier Requires Such Information, Cavalier Could Obtain It Through A Field Survey

Cavalier's Proposed Section 11.2.15.4 would require Verizon to provide greatly expanded information to a Dark Fiber Inquiry from Cavalier – much more information than any other CLEC has requested. Under Cavalier's proposal, Verizon would have to specify whether fiber is: (i) installed and available, (ii) installed but not available, or (iii) not installed. Where fiber is not available, Verizon would have to describe in detail why fiber is not available, "including, but not limited to, specifying whether fiber is present but needs to be spliced, whether no fiber at all is present between the two points specified by Cavalier, whether further work other than splicing needs to be performed, and the nature of any such further work other than splicing." Cavalier's Proposed Section 11.2.15.4. If fiber is installed, whether or not it is available, then Verizon would also have to specify "the locations of all pedestals, vaults, other intermediate points of connection...[and] which portions have available fiber and which portions do not." *Id.*

Like many of Cavalier's proposals, this one would impose expansive (and expensive) new obligations upon Verizon for no good reason. For example, Cavalier would require Verizon to specify whether "fiber is present but needs to be spliced." Cavalier's Proposed Section 11.2.15.4. This information is unnecessary because Verizon has no obligation to provide access to dark fiber at splice points, as the Commission (and the Bureau) have confirmed. *Triennial Review Order* ¶ 254; *Virginia Arbitration Order* ¶ 451.

Likewise, there is no basis for Cavalier's request to know the locations of all pedestals, vaults, other intermediate points of connection, and whether dark fiber is available at any of these points. In section 271 proceedings involving Virginia and other states, the Commission

held that the dark fiber information that Verizon provides is sufficient. *See, e.g., Virginia § 271 Order* ¶¶ 145-147; *MD/DC/WV § 271 Order* ¶¶ 123-126.

Cavalier states that its proposed language is intended to "reduce uncertainty about whether fiber is 'terminated.'" *Ashenden Direct* at 2:15-16. There should be no uncertainty on this point; terminated dark fiber is fiber that is physically connected to accessible terminals. As Verizon witness Shocket explained at the Hearing, Verizon does not "partially terminate [dark] fiber." Rather, Verizon "fully connect[s] it to the fiber distribution panel in each of the central offices." *Hearing Tr.* at 238:17-20 (Shocket).

Finally, the cost of providing the information sought by Cavalier is not included in Verizon's rates for dark fiber inquiries. *Albert Rebuttal* at 12:15-18. As Verizon witness Albert explained at the hearing, the dark fiber "inquiry was developed to be something fast and relatively cheap and not contain a lot of information so the CLECs get a quick go or no-go answer inquiry process." *Hearing Tr.* at 279:2-5 (Albert). If Cavalier is not satisfied with the response it receives to the dark fiber inquiry and requires more detailed information, Cavalier can obtain such information though a more detailed, "one of a kind" field survey. *Hearing Tr.* at 214:18 – 215:6; 283:19 – 285:1 (Albert).

For all of the reasons stated above, the Bureau should reject Cavalier's proposed changes to Verizon's proposed contract language regarding dark fiber.

IX. THE BUREAU SHOULD ADOPT VERIZON'S PROPOSAL TO PROVIDE UNDBUNDLED LOOPS TO CUSTOMERS SERVED BY IDLC BECAUSE IT COMPLIES WITH THE *TRIENNIAL REVIEW ORDER* (ISSUE C14)

Verizon has shown, and Cavalier has not disputed, that Verizon's proposal to provide unbundled loops to customers served by Integrated Digital Loop Carrier ("IDLC") is consistent with the Commission's *Triennial Review Order*. *Albert Panel Rebuttal* at 13:23 – 14:20.

Cavalier, however, urges the Bureau to impose requirements that the Commission did not – specifically, Cavalier would require Verizon to develop two new methods of unbundling IDLC loops. Verizon has shown that these methods are impractical and excessively expensive, and Cavalier's proposal should therefore be rejected.

In the *Triennial Review Order*, the Commission ruled that incumbent carriers had the option of providing unbundled loops to customers served by IDLC through either a spare copper facility, or a Universal Digital Loop Carrier ("UDLC") system, or another "technically feasible method of unbundled access." *Triennial Review Order* ¶ 297. The Commission did not require incumbents to unbundle loops served by IDLC. Indeed, the Commission observed that unbundled access to IDLC-served loops is "not always desirable for either carrier." *Id.* at ¶ 297 n. 855.

Verizon's proposal meets the *Triennial Review Order* requirements. Under that proposal, when Verizon receives a request for an unbundled 2-wire analog loop for a customer served by IDLC, Verizon checks to see whether the customer can be served by a spare UDLC or copper loop. If such a spare loop is available, it is used. If such a loop is not available, however, Verizon checks to see whether it can rearrange loops among its customers to make a non-IDLC loop available. This process is called a line and station transfer. If a line and station transfer is not possible, the CLEC may then request that Verizon construct additional loop facilities – a new step in the process that Verizon has instituted because of the *Triennial Review Order*. If a CLEC makes such a request, Verizon will initiate an engineering job to construct additional facilities to provide either a copper loop or a UDLC loop. *Albert Panel Rebuttal* at 14:10-20. Of course, Cavalier may also elect to serve the customer using UNE-P, resale, or subloops, rather than by having Verizon construct new facilities. *Albert Panel Rebuttal* at 15:16-17; *Hearing Tr.* at

108:20 (Clayton).

In most instances, Verizon can provide an unbundled loop for a customer served by IDLC without constructing additional loop facilities. In fact, only about one percent of Verizon's working access lines in Virginia are located at an outside plant terminal where only loops on IDLC are available. *Hearing Tr.* at 126:16 (Albert). It is in these rare instances that, in response to the Commission's direction in the *Triennial Review Order*, Verizon has offered the option of additional construction to CLECs. *Hearing Tr.* at 113:7-12 (Albert).

The rates that Verizon proposes to charge in these unusual cases – line and station transfer, engineering query, engineering work order, and time and materials charges – are the same or lower than the rates that were included as part of Verizon's section 271 application in Virginia. *Albert Panel Rebuttal* at 15:4-12. It is up to Cavalier whether it passes all or a portion of these charges on to its customers. When Verizon constructs new facilities for its customers in Virginia, it does not pass the construction costs on to those customers. Cavalier is free to do the same. *Hearing Tr.* at 142:7-8 (Clayton).[5]

Cavalier asks the Bureau to impose an additional requirement to develop and trial two specific new methods of unbundling IDLC loops. Cavalier's Proposed Section 11.4.1. Verizon, however, has already evaluated the new methods – hairpin/nailup and multiple switch hosting – described by Cavalier and explained why Cavalier's proposal, if adopted, would be a waste of time and money. In 2000, at Cavalier's request, Verizon prepared an engineering evaluation of the hairpin approach and gave it to Cavalier. *Albert Panel Rebuttal* at 18:4-10; Exhibit C. This analysis concluded that "hairpin/nail-up is not a cost justifiable architecture for unbundled loop hand-offs using a DS1 interface. For unbundled loops ordered for end users currently served on

[5] For a more detailed description of the changes that Verizon has made to its processes and procedures in light of the *Triennial Review Order*, please refer to *Albert Panel Rebuttal*; Exhibit A.

IDLC, it is more economical to continue to use current methods by moving the loop to Universal DLC, or parallel copper, if available." These conclusions are still valid today. *Albert Panel Rebuttal* at 18:10-13. As Verizon witness Albert explained at the Hearing:

> [Verizon] did that work back in July 2000. I've probably got about $50,000 worth of engineering time into that analysis that [Verizon] did at Cavalier's request. If you read that document, that basically includes more depth and more information relative to the hairpin method than what [Verizon] would typically create for the readout of a first stage trial, for getting the electrons to flow, to see if it would even work. Now, the conclusion of that analysis, Exhibit C in my testimony, is yes, we believe that you could get the electrons to flow. But the punch line is that it would be tremendously more expensive to develop and to invent than the two methods that we will make available to Cavalier in these very narrow circumstances.

Hearing Tr. at 112:7-22. Mr. Albert also explained that an MCI document identified hairpinning as the least desirable potential unbundling technique to be used when end users were served by IDLC facilities. *Albert Panel Rebuttal* at 18:14-16.

Cavalier initially claimed that the second alternative for unbundling IDLC loops – multiple switch hosting – would be more feasible because Cavalier has conducted a successful test of this approach. *Vermeulen Direct* at 5:15-21. But Cavalier's trial used a particular IDLC interface – the GR 303 interface – which is not used or deployed in any Verizon Virginia IDLC systems or switches. *Albert Panel Rebuttal* at 18:21-22; *Hearing Tr.* at 117:15-20 (Albert). Indeed, when Cavalier witness Vermeulen discovered that Verizon Virginia has not deployed the GR-303 interface, he agreed that multiple switch hosting was not a viable option:

> with regard to switch multihosting, we were not aware, we assumed that Verizon had GR 303 employed in the network. And when we discovered they do not, obviously switch multihosting is not an option.

Hearing Tr. at 132:14-18 (Vermeulen).

In addition, Cavalier's trial involved only one carrier – Cavalier. Multiple switch hosting used to provide UNE loops, however, would involve connecting individual GR-303 IDLC

systems to the digital switches of *multiple* carriers. Such an arrangement is not technically feasible because of unresolved network reliability and network security issues. *Albert Panel Rebuttal* at 18:21-26 – 19:1-6. This is because GR-303 equipment was originally designed for a single-carrier environment. A multi-carrier environment, however, is much more sophisticated. Verizon is not aware of any vendor or industry solution that supports multi-carrier access to GR-303. This is confirmed in a letter from Alcatel, the primary manufacturer of Digital Loop Carrier systems used by Verizon. *Albert Panel Rebuttal* at 18:7-11; Exhibit D. Even other CLECs have conceded that GR-303 cannot provision unbundled loops. AT&T stated in its *Triennial Review* comments that "[t]here are provisioning, alarm reporting, and testing issues that have not yet been worked out for using GR-303 in a multi-carrier environment," and "other operational concerns must be addressed before the deployment of any solution whose underlying architecture and technology is premised on GR-303 DLCs."[6]

Even if all these problems with multiple switch hosting were solved, it would still be prohibitively expensive for CLECs because it would require them to provision multiple DS1 connections to every GR-303 digital line carrier system in a central office. *Albert Panel Rebuttal* at 18:12-20.

Finally, Cavalier proposes a sixty-day trial. The scope of Cavalier's proposed trial is not clear, but sixty days is a grossly insufficient amount of time to implement a trial in which Verizon must develop new processes, purchase, engineer, and install new hardware and software, and implement operations support system changes. Cavalier's proposed timeframe would also violate the change control requirements for customer notifications, and it would not allow for time for necessary field force methods, procedures, and training to take place. In sum, an IDLC

[6] Letter from Joan March, Director, Federal Government Affairs, AT&T Corp., to Marlene Dortch, Secretary FCC, CC Docket No. 01-338, 96-98, and 98-147, at 3 (filed Dec. 4, 2002).

unbundling trial would be too complicated to complete within sixty-days. *Albert Panel Rebuttal* at 19:4-11.

For all of these reasons, the Bureau should reject Cavalier's Proposed Section 11.4.

X. THE BUREAU SHOULD REJECT CAVALIER'S PROPOSAL TO REQUIRE VERIZON TO COORDINATE WITH OTHER ATTACHERS TO IMPLEMENT A UNIFIED ENGINEERING AND MAKE-READY PROCESS FOR POLE ATTACHMENTS (ISSUE C16)

Cavalier demands broad changes to a pole attachment process that it almost never uses and that would impact nearly every other attacher in Virginia. The terms Verizon proposes, by contrast, are precisely the same as those in the AT&T interconnection agreement resulting from the *Virginia Arbitration Order*. These proposals also reflect a pole attachment process that the Commission, during Verizon's 271 application in Virginia, has already found complies with the Act. *Virginia § 271 Order* ¶ 193.

During the Virginia 271 proceeding, Cavalier made the same pole attachment complaints that it does here. The Virginia Hearing Examiner rejected those complaints, concluding that "Cavalier has failed to provide any evidence that Verizon Virginia's policies and practices regarding pole attachments are discriminatory towards it or other CLECs."[7] *Virginia Hearing Examiner Report* at 95.

Cavalier nevertheless proposes a new permitting and make-ready process in which a single contractor, coordinated by Verizon, would perform all make-ready work for each pole attachment project in Virginia. As Cavalier witness Ashenden acknowledges, these projects typically involve a number of companies, including telecommunications carriers, cable companies, and electric utilities, all of whom would have to agree to this new process. *See Ashenden Direct* at 7:7-8:18; 10:21. Cavalier would make Verizon "primarily responsible for

[7] In response to Staff's question at the Hearing, the Commonwealth of Virginia has not asserted jurisdiction to regulate poles, ducts, conduits, and rights-of-way under § 224(c) of the Act.

meeting with, and seeking the concurrence of, other parties attached to the poles." Cavalier's Proposed Section 16.2.2. This means that Verizon would have to renegotiate potentially all of its pole-sharing license agreements in Virginia with no guarantee that any other attacher would agree to these new terms. Verizon provides approximately 156,000 pole attachments to over 120 different parties under license agreements in Virginia. *Young Direct* at 3:2-4.

There is no legal basis for imposing such a sweeping obligation on Verizon. Nowhere does the Act or any Commission rule require Verizon to assume a role as project-coordinator for all pole attachers in Virginia. *Young Direct* at 7:6-9.

Nor has Cavalier shown that there is any pole attachment problem in Virginia to fix. Cavalier asserts that it has experienced unnecessary costs, delays, and inefficiencies as a result of Verizon's pole attachment policies, but Cavalier has not requested a single pole attachment in Virginia in the last two years. *Young Direct* at 8:6; *Young Rebuttal* at 4:8. In Verizon's section 271 proceeding in Virginia, the Virginia Hearing Examiner found that "Cavalier submitted only six applications in the last 18 months, in contrast to the 158,504 pole attachment applications of 58 telecommunications carriers and 160 other entities." *Virginia Hearing Examiner Report* at 93. Cavalier's description of the pole attachment process predates Verizon centralization of the application process, and does not reflect current procedures. *Hearing Tr.* at 337:4 – 339:7. Furthermore, to the extent Cavalier suffered delays in prior periods, Cavalier's witness Mr. Ashenden testified that those delays were often caused not by Verizon, but by "other attachers [who] did not always inform Cavalier when their work was completed." *Ashenden Rebuttal* at 8:1-2; Exhibit MA-1. *See also Ashenden Direct* at 7:16-20 (criticizing duplicative costs, not Verizon's charges). Cavalier has no basis to challenge Verizon's pole attachment procedures, and Verizon is not responsible for the costs and delays Cavalier alleges.

Even if aspects of Verizon's pole attachment process could be streamlined, it is clear that this two-party arbitration is an inappropriate proceeding in which to overhaul a licensing process that affects nearly all carriers in Virginia. The e-mails attached to Mr. Ashenden's testimony reinforce the complexity of pole attachment issues and highlight the number of interested parties that would need to be involved in discussions regarding a significant revision of the make-ready process. *See, e.g., Ashenden Rebuttal* at Exhibit MA-8 (discussing six attachers along one fifteen-mile route). Mr. Ashenden's surrebuttal testimony also demonstrates that the pole attachment process involves multiple parties with competing interests. *Ashenden Surrebuttal* at 2:19-3:9 (discussing concerns expressed by Cox Cable about using a single contractor for make-ready work).

Cavalier nonetheless claims its proposal can be implemented in this proceeding because Verizon is the "lone hold-out" to its proposal. *Ashenden Direct* at 8:15-18. Mr. Griles of Dominion Virginia Power, however, explained in his Surrebuttal Testimony, that Mr. Ashenden is mistaken. *Griles Surrebuttal* at 1:21-2:15. Dominion Virginia Power did explore the implementation of a single contractor make-ready process, but, as Mr. Griles explained, "[a]ttaching entities agreed to the concept of a single contractor for make-ready work only in theory, but not in practice." *Griles Surrebuttal* at 3:11-12. Mr. Griles recalled that "many of the attachers never returned [his] calls and others indicated that their internal discussions had raised several concerns." *Griles Surrebuttal* at 2:5-6. Mr. Ashenden's submitted surrebuttal testimony in response to Mr. Griles, but that surrebuttal does not contradict Mr. Griles and instead admits that "Cavalier has a limited amount of directly acquired information about these issues." *Ashenden Surrebuttal* at 2:11.

In short, Cavalier has not established any basis for the sweeping changes that it proposes

for Verizon's pole attachment process. Cavalier's proposed contract language on this issue should therefore be rejected.

XI. THE BUREAU SHOULD REJECT CAVALIER'S PROPOSED PENALTY REGIME AND ITS MODIFICATIONS TO CONTRACT LANGUAGE APPROVED BY THE BUREAU IN THE *VIRGINIA AT&T AGREEMENT* (ISSUE C17)

This issue involves Cavalier's attempt to modify contract language approved by the Bureau in the existing *Virginia AT&T Agreement*, to require new investigative procedures and heavy penalties for allegedly "unprofessional" customer contacts. Cavalier's Proposed Sections 18.2.5 – 18.2.7; *Virginia AT&T Agreement* Sections 18.2.1 – 18.2.4. Cavalier has failed to demonstrate any need for its extreme proposal, which would impose obligations on Verizon far broader than those required by the Act. Cavalier's proposed language is, in addition, too vague to be workable; its effect (and likely intent) would be to penalize legitimate competitive activities. The Bureau should not permit Cavalier to use its interconnection contract with Verizon as a means of discouraging lawful, pro-competitive conduct that Cavalier simply may not like.

Verizon agrees that when a customer of either party mistakenly contacts the other party, that customer should be referred to the right carrier in a courteous, professional and non-disparaging manner. Verizon's proposal reflects this principle by acknowledging that "Cavalier shall be the single point of contact for Cavalier customers with regard to all services, facilities or products provided by Verizon to Cavalier and other services and products which they wish to purchase from Cavalier." Verizon's Proposed Section 18.2.1. Verizon's proposal also provides that when either party receives misdirected inquiries from the other party's customers, that carrier will refer the customer to the right carrier in a courteous, non-disparaging manner and at no charge. *Smith Direct* at 15; *Hearing Tr.* 209:4-9 (Smith); Verizon's Proposed Sections